

**REMARKS**

In the Office Action of January 24, 2008, it was stated that Applicants had introduced new matter into the specification by adding Tables 1, 2, and 3 (in English) in the substitute specification since there is no translation of Tables 1, 2, and 3 (in German) of the original disclosure. Attached please find a copy of Tables 1, 2, and 3 as they appear in the Substitute Specification in English and also a copy of Tables 1, 2, and 3 as they appear in German in the U.S. National Stage Application as filed. Additionally, please find attached a Verification of Translation certifying that the English Tables 1, 2, and 3 are the same as the German Tables 1, 2, and 3.

Accordingly, Applicants respectfully request that the objection under 35 U.S.C. § 132(a) as introducing new matter into the specification be withdrawn.

No fee is believed due. If there is any fee due the USPTO is hereby authorized to charge such fee to Deposit Account No. 10-1250.

F-8596

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant : Rolf MUELLER, et al.  
Serial No. : 10/527,545  
Filed : August 4, 2005  
For : FOOD BASED ON STARCH NETWORKS  
Group Art Unit : 1794  
Examiner : Thuy Tran Lien

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**VERIFICATION OF TRANSLATION**

Sir:

I, Sarah Hubinger, residing at 295 Convent Avenue, New York, New York 10031, hereby declare that I am fluent in German. Appended hereto are Table 1, Table 2, and Table 3 in English and German. I hereby certify that the English and German versions are the same.

I further declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both,

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F-8596

Ser. No. 10/527,545

under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Date: 5/14/08By: 

Name: Sarah Hubinger

# SUBSTITUTE SPECIFICATION

F-8596

Ser. No. 10/527,545

Nr.	VS2	von	VS1	VS1 [%]	NS	NS [%]
PG1	Potato Starch pregelatinised	Avebe	-	-	NS-1	10
PG2	Potato Starch pregelatinised	Avebe	-	-	NS-1	10
P14/10	Corn Meal precooked (for Arepas and Empanadas)	Venezuela	Corn Starch	20	NS-2	5
P15/3	Potato Starch	Cerestar	Potato Starch	17.5	NS-2	2.5
P15/4	Corn Starch	Cerestar	Potato Starch	17.5	NS-2	2.5
P15/5	Taploca Starch	Cerestar	Wheat Starch	17.5	NS-2	2.5
P15/6	Wheat Starch	Cerestar	Potato Starch	17.5	NS-2	2.5
P17/1	Potato Whole Meal	Biorex	Potato Starch	17.5	NS-2	2.5
P19/1	Potato Starch pregelatinised	Avebe	-	-	NS-3	10
P19/2	Potato Starch pregelatinised	Avebe	-	-	NS-1	5
P19/3	Corn Starch pregelatinised	Roquette	-	-	-	-
P19/5	Potato Starch pregelatinised	Avebe	-	-	NS-4	5
P19/6	Corn Starch pregelatinised	Roquette	-	-	NS-1	5
P19/7	Wheat Flour	Coop	Potato Starch	27	NS-1	3
P19/8	Potato Whole Meal	Biorex	Modified Starch 1	27	NS-1	3
P19/9	Maranta/Taploca Flour	Biorex	Modified Starch 2	27	NS-1	3
P19/10	Corn Meal (for Tortillas & Tamales)	Mexico	Potato Starch	27	NS-1	3
P19/11	Corn Meal (for Tortillas & Tamales)	Mexico	Corn Starch	27	NS-1	3
P19/12	Wheat Flour	Coop	Potato Starch	27	NS-1	3
P19/13	Corn Starch pregelatinised	Roquette	-	-	NS-1	10
P19/14	Corn Meal (for Tortillas & Tamales)	Mexico	-	-	NS-1	3
P19/15	Corn Meal (for Tortillas & Tamales)	Mexico	-	-	NS-3	10
P19/16	Corn Meal (for Tortillas & Tamales)	Mexico	-	-	NS-3	7
P19/17	Wheat Flour	Coop	-	-	NS-1	10
P19/18	Hard Wheat Grits	Migros	-	-	NS-1	10
P19/19	Rice Flour	Blofarm	-	-	NS-1	10
P20/1	Corn Flour	Asia	-	-	NS-1	7
P20/2	Potato Whole Meal	Biorex	-	-	NS-1	7
P20/3	Cassava Whole Meal	Asia	-	-	NS-1	7
P20/5	Rice Flour	Blofarm	-	-	NS-1	7
P20/6	Buckwheat Whole Meal	Holle	-	-	NS-1	7
P20/7	Roasted Mung Bean Whole Meal	Sri Lanka	-	-	NS-1	7
P20/8	Palmroot Whole Meal	Sri Lanka	-	-	NS-1	7

Table 1: Examples for pasta products made of different flours, starches and grits based on starch networks.

# SUBSTITUTE SPECIFICATION

F-8596

Ser. No. 10/527,545

Nr.	Pasta Products from	E [MPa]	$\sigma$ [MPa]	$\epsilon$ [%]	Wq [%]
	<b>Hard Wheat Pasta</b>	< 0.1		< 10	56
P15/3	<b>Potato Starch</b>	7.3	1.3	31	45
P15/4	<b>Corn Starch</b>	8.5	1.0	20	43
P15/5	<b>Tapioca Starch</b>	10.8	1.5	20	40
P17/1	<b>Potato Whole Meal</b>	6.0	1.1	32	50
P19/1	<b>Potato Starch</b>	5.3	1.1	45	54
P19/5	<b>Potato Starch</b>	7.0	1.6	42	51
P19/6	<b>Corn Starch</b>	7.2	0.9	18	48
P19/8	<b>Potato Whole Meal</b>	6.0	0.7	19	53
P19/9	<b>Maranta/Tapioca Flour</b>	3.8	0.7	30	54
P19/10	<b>Corn Meal</b>	5.8	0.7	19	52
P19/11	<b>Corn Meal</b>	7.8	1.0	21	47
P19/12	<b>Wheat Flour</b>	3.1	0.8	40	52
P19/13	<b>Corn Starch</b>	9.9	1.4	25	45
P19/14	<b>Corn Meal</b>	8.0	0.3	7	44
P19/15	<b>Corn Meal</b>	8.3	0.6	12	49
P19/16	<b>Corn Meal</b>	7.3	0.5	11	46
P19/17	<b>Wheat Flour</b>	2.1	0.5	33	55
P19/18	<b>Hard Wheat Grits</b>	4.5	0.7	22	53
P19/19	<b>Rice Flour</b>	3.7	0.7	27	49

Table 2: Mechanical properties in a tensile test (elasticity modulus (E), breaking strength (s) and breaking elongation (e)) for pasta products made out of various raw materials based on starch networks. The pasta products were each swelled to equilibrium in excess water at 24 °C before the tensile test. Wq is the water content after swelling (relative to the respective moisture content). After similarly swelled, conventional hard wheat has too low a strength to be analyzed in a tensile test. Its elasticity modulus lies at < 0.1 MPa.

# SUBSTITUTE SPECIFICATION

F-8596

Ser. No. 10/527,545

Sample	Conditioning	E [MPa]	$\sigma$ [MPa]	$\epsilon$ [%]
<b>Hard Wheat Pasta</b> (Tagliatelle Napoli, Coop)		< 0.1		
<b>P20/1: Corn Flour</b> (Asia)	A	ca. 1.0		
	B	2.0	0.30	24
	D	3.9	0.50	21
	C	5.6	0.68	22
<b>P20/2: Potato Whole Meal</b> (Blorex)	A	4.9	0.55	21
	B	6.1	0.64	17
	D	7.0	0.56	12
	C	6.3	0.56	16
<b>P20/3: Cassava Whole Meal</b> (Asia)	A	ca. 0.4		
	B	ca. 1.5		
	D	ca. 1.5		
	C	4.0	0.44	16
<b>P20/5: Rice Flour</b> (Blofarm)	A	ca. 0.1		
	B	ca. 0.5		
	D	ca. 1.0		
	C	2.8	0.33	20
<b>P20/6: Buckwheat Whole Meal</b> (Holle)	A	ca. 1.5		
	B	ca. 2.0		
	D	2.0	0.28	23
	C	3.3	0.42	22
<b>P20/7: Roasted Mung Bean Whole Meal</b> (containing fibers, Sri Lanka)	D	3.9	0.12	7
<b>P20/8: Palmroot Whole Meal</b> (containing fibers, Sri Lanka)	D	7.9	0.37	8

Table 3: Influence of conditioning conditions on the mechanical properties of elasticity modulus (E), breaking strength ( $\sigma$ ) and breaking elongation ( $\epsilon$ ) measured in the tensile test for pasta products made out of flours of varying origin (procedural variant 3.2) based on a starch network with 7 % NS. Before the tensile test, the pasta products were swelled to equilibrium for 24 h in excess water at 24 °C. The elasticity moduli specified with approx. are sensory estimates, as the corresponding samples could not be analyzed in the tensile test due to too low of a strength. Conventional hard wheat pasta also has too low of a strength after similar swelling to be analyzed in the tensile test. Its elasticity modulus lies at < 0.1 MPa. Conditioning clearly has an in part considerable influence on the mechanical properties. The corresponding differences are rooted in various network densities. Surprisingly, clearly higher elasticity moduli and strengths can be achieved even with full and low quality raw meal than with conventional hard wheat pasta.

Table 1

Nr.	VS2	von	VS1	VS1 [%]	NS	NS [%]
PG1	Kartoffelstärke pregelatinisiert	Avebe	-	-	NS-1	10
PG2	Kartoffelstärke pregelatinisiert	Avebe	-	-	NS-1	10
P14/10	Maismehl vorgekocht (für Arepas und Empanadas)	Venezuela	Maisstärke	20	NS-2	5
P15/3	Kartoffelstärke	Cerestar	Kartoffelstärke	17.5	NS-2	2.5
P15/4	Maisstärke	Cerestar	Kartoffelstärke	17.5	NS-2	2.5
P15/5	Tapiokastärke	Cerestar	Weizenstärke	17.5	NS-2	2.5
P15/6	Weizenstärke	Cerestar	Kartoffelstärke	17.5	NS-2	2.5
P17/1	Kartoffel Vollmehl	Biorex	Kartoffelstärke	17.5	NS-2	2.5
P19/1	Kartoffelstärke pregelatinisiert	Avebe	-	-	NS-3	10
P19/2	Kartoffelstärke pregelatinisiert	Avebe	-	-	NS-1	5
P19/3	Maisstärke pregelatinisiert	Roquette	-	-	-	-
P19/5	Kartoffelstärke pregelatinisiert	Avebe	-	-	NS-4	5
P19/6	Maisstärke pregelatinisiert	Roquette	-	-	NS-1	5
P19/7	Weissmehl	Coop	Kartoffelstärke	27	NS-1	3
P19/8	Kartoffel Vollmehl	Biorex	Mod. Stärke 1	27	NS-1	3
P19/9	Maranta/Tapioka Mehl	Biorex	Mod. Stärke 2	27	NS-1	3
P19/10	Maismehl (für Tortillas & Tamales)	Mexico	Kartoffelstärke	27	NS-1	3
P19/11	Maismehl (für Tortillas & Tamales)	Mexico	Maisstärke	27	NS-1	3
P19/12	Weissmehl	Coop	Kartoffelstärke	27	NS-1	3
P19/13	Maisstärke pregel.	Roquette	-	-	NS-1	10
P19/14	Maismehl (für Tortillas & Tamales)	Mexico	-	-	NS-1	3
P19/15	Maismehl (für Tortillas & Tamales)	Mexico	-	-	NS-3	10
P19/16	Maismehl (für Tortillas & Tamales)	Mexico	-	-	NS-3	7
P19/17	Weissmehl	Coop	-	-	NS-1	10
P19/18	Hartweizengries	Migros	-	-	NS-1	10
P19/19	Reismehl	Biofarm	-	-	NS-1	10
P20/1	Maismehl	Asien	-	-	NS-1	7
P20/2	Kartoffel Vollmehl	Biorex	-	-	NS-1	7
P20/3	Cassava Rohmehl	Asien	-	-	NS-1	7
P20/5	Reismehl	Biofarm	-	-	NS-1	7
P20/6	Buchweizen Rohmehl	Holle	-	-	NS-1	7
P20/7	Roasted Mung Bean Rohmehl	Sri Lanka	-	-	NS-1	7
P20/8	Palmwurzel Rohmehl	Sri Lanka	-	-	NS-1	7

Table 2

Nr.	Teigwaren aus	E [MPa]	$\sigma$ [MPa]	$\varepsilon$ [%]	Wq [%]
	Hartweizen Pasta	< 0.1		< 10	56
P15/3	Kartoffelstärke	7.3	1.3	31	45
P15/4	Maisstärke	8.5	1.0	20	43
P15/5	Taplokastärke	10.8	1.5	20	40
P17/1	Kartoffel Vollmehl	6.0	1.1	32	50
P19/1	Kartoffelstärke	5.3	1.1	45	54
P19/5	Kartoffelstärke	7.0	1.6	42	51
P19/6	Maisstärke	7.2	0.9	18	48
P19/8	Kartoffel Vollmehl	6.0	0.7	19	53
P19/9	Maranta/Tapioka Mehl	3.8	0.7	30	54
P19/10	Maismehl	5.8	0.7	19	52
P19/11	Maismehl	7.8	1.0	21	47
P19/12	Weissmehl	3.1	0.8	40	52
P19/13	Maisstärke	9.9	1.4	25	45
P19/14	Maismehl	8.0	0.3	7	44
P19/15	Maismehl	8.3	0.6	12	49
P19/16	Maismehl	7.3	0.5	11	46
P19/17	Weissmehl	2.1	0.5	33	55
P19/18	Hartweizengries	4.5	0.7	22	53
P19/19	Reismehl	3.7	0.7	27	49



Table 3

Probe	Behandlung	E [MPa]	$\sigma$ [MPa]	$\epsilon$ [%]
<b>Hartweizen Pasta</b> (Tagliatelle Napoli, Coop)		< 0.1		
<b>P20/1: Maismehl</b> (Asien)	A	ca. 1.0		
	B	2.0	0.30	24
	D	3.9	0.50	21
	C	5.6	0.68	22
<b>P20/2: Kartoffel Vollmehl</b> (Biorex)	A	4.9	0.55	21
	B	6.1	0.64	17
	D	7.0	0.56	12
	C	6.3	0.56	16
<b>P20/3: Cassava Rohmehl</b> (Asien)	A	ca. 0.4		
	B	ca. 1.5		
	D	ca. 1.5		
	C	4.0	0.44	16
<b>P20/5: Reismehl</b> (Biofarm)	A	ca. 0.1		
	B	ca. 0.5		
	D	ca. 1.0		
	C	2.8	0.33	20
<b>P20/6: Buchweizen Rohmehl</b> (Holle)	A	ca. 1.5		
	B	ca. 2.0		
	D	2.0	0.28	23
	C	3.3	0.42	22
<b>P20/7: Roasted Mung Bean Rohmehl</b> (stark fasrig, Sri Lanka)	D	3.9	0.12	7
<b>P20/8: Palmwurzel Rohmehl</b> (stark fasrig, Sri Lanka)	D	7.9	0.37	8